

IN THE CLAIMS

1-21. (canceled)

22. (currently amended) A method for a seamless display and analysis of dual resolution image data, said method comprising:

reviewing image data of an object at low-resolution low-resolution;

performing a volumetric analysis of at least one feature of interest in the low resolution low-resolution image data;

substituting high-resolution image data of the at least one feature of interest for the analyzed low-resolution low-resolution image data without operator intervention;

analyzing the high-resolution image data; [[and]]

linking the low-resolution low-resolution image data to the high-resolution data to facilitate seamlessly high-resolution image data;

displaying a volume rendering of the low-resolution data and low-resolution image data;

displaying analysis results of the high-resolution data in a single display image data;
and

seamlessly toggling between a volume rendering of the low-resolution image data and the analysis results of the high-resolution image data within a single display.

23. (currently amended) A method in accordance with Claim 22 wherein an area in an object in which the high-resolution data represents is selected based on results of a CAD algorithm further comprising selecting an area in the object represented by the high-resolution image data using a CAD algorithm.

24. (currently amended) A method in accordance with Claim 22 wherein the high resolution high-resolution image data is present for only the features of interest identified by a CAD algorithm.

25. (currently amended) A method in accordance with Claim 22 further comprising obtaining high-resolution high-resolution image data representative of an area in an object for which high-resolution high-resolution image data has not been obtained.

26-39. (canceled)

40. (currently amended) A computer program embodied on a computer readable medium for acquiring medical image data, the computer program comprising: configured to:

a computer-readable medium; and

a computer program stored on the medium and including routines for:

receiving low-resolution receive low-resolution image data;

performing perform a volumetric analysis of at least one feature of interest in the low resolution low-resolution image data;

substituting substitute high-resolution image data for analyzed low-resolution low-resolution image data without operator intervention;

analyzing analyze the high-resolution image data; [[and]]

linking link the low-resolution low-resolution image data to the high-resolution data to facilitate seamlessly high-resolution image data;

displaying display a volume rendering of the low-resolution data and low-resolution image data;

display analysis results of the high-resolution data in a single display image data; and

seamlessly toggle between the volume rendering of the low-resolution image data and the analysis results of the high-resolution image data within a single display.

41. (currently amended) A computer program in accordance with Claim 40 wherein an area in an object in which the high resolution data represents is selected based on results of a CAD algorithm further configured to select an area in the object represented by the high-resolution image data using a CAD algorithm.

42. (currently amended) A computer program in accordance with Claim 40 wherein the high resolution further configured to present high-resolution data is present for only the features of interest identified by a CAD algorithm.

43. (currently amended) A computer program in accordance with Claim 40 further comprising a routine for obtaining high resolution configured to obtain high-resolution data representative of an area in an object for which high resolution high-resolution data has not been obtained.

44. (currently amended) An imaging system comprising:

a first image data acquisition system configured to acquire medical images; and

a computer coupled to the image data acquisition system and configured to:

receive low-resolution low-resolution image data;

perform a volumetric analysis of at least one feature of interest in the low-resolution low-resolution image data;

substitute high-resolution image data for the analyzed low-resolution low-resolution image data without operator intervention;

analyze the high-resolution image data; [[and]]

link the low-resolution low-resolution image data to the high-resolution data to facilitate seamlessly high-resolution image data;

displaying display a volume rendering of the low-resolution data and low-resolution image data;

display analysis results of the high-resolution data in a single display image data; and
seamlessly toggle between the volume rendering of the low-resolution image data and the analysis results of the high-resolution image data within a single display.

45. (currently amended) A system in accordance with Claim 44 wherein an area in an object in which the high-resolution data represents is selected based on results of a CAD algorithm configured to select an area in the object is represented by the high-resolution image data using a CAD algorithm.

46. (currently amended) A system in accordance with Claim 44 wherein the high resolution high-resolution image data is present for only the features of interest identified by a CAD algorithm.

47. (currently amended) A system in accordance with Claim 44 further comprising a routine for obtaining high-resolution high-resolution image data representative of an area in an object for which high-resolution high-resolution image data has not been obtained.